

Circuit Introduction

CIRCUIT TRAINING

Objectives

To takeoff and follow published procedures that conform to the aerodrome traffic circuit, avoiding conflict with other aircraft.

To carry out an approach and landing using the most suitable runway.

1. Considerations

Takeoff

Slipstream	Strikes tail and yaws aeroplane
Torque	Tries to rotate aeroplane and yaws aeroplane
Keeping straight	With rudder as required – look ahead
Crosswind	Tries to weathercock aeroplane, keep straight
Headwind	Reduces takeoff roll – always takeoff into wind
Tailwind	Increases takeoff roll
Climb angle	Headwind increases climb angle
Takeoff into wind	To minimise ground roll and distance to 50'
Power	Full power for maximum performance
Flap	Usually not used
Runway length	Calculated length required for takeoff

Landing

Wind	Into wind to reduce ground roll and distance from 50'
Flap	↑ L and D, lower speed and lower nose attitude
Power	Controls RoD, more airflow over elevator and rudder
Brakes	On ground only
Runway length	Calculated length required for landing

2. Airmanship

- ATC/Traffic
- Checklists
- Right of Way rules

U Undercarriage	Down and locked
B Brakes	Brake pressure checked, park brake off
M Mixture	Mixture rich
F Fuel	Fuel on fullest tank, fuel pump on, pressure checked
H Harnesses & Hatches	Seatbelt secure and doors/canopy closed

3. Aeroplane Management

S Suction	Suction gauge operating in the green range
A Amps/Alternator	Alternator functioning correctly
D DI	DI synchronised to compass and functioning correctly
I Ice	Carb ice checked for and carb heat applied if required
E Engine	Temperatures and pressures are in green range

4. Human Factors

- Landing cues
- Workload/priorities

5. Air Exercise

- Takeoff**
 - Reference point and line up checks
 - Hold on brakes
 - Keep straight
- Climb Out**
 - Separation
 - After takeoff checks
 - Turn at 500' agl
- Crosswind**
 - Tracking and lookout
- Downwind**
 - Downwind radio call
 - Checks
 - Spacing
- Base Turn**
 - Lookout
 - Reference point
 - Carb heat HOT
 - Power reduced to _____
 - Turn
 - Airspeed _____
 - Flap – first stage
- Base Leg**
 - Track
 - Flap – further stage(s)
 - Attitude controls airspeed
- Final**
 - Anticipate turn – 500'
 - Aim point
 - Attitude controls airspeed
 - Power controls RoD
 - Short final carb heat COLD
- Landing**
 - Landing assured, close throttle
 - At 50' nose progressively raised for roundout/flare
 - Look down end of runway
 - Progressively increase back pressure to control sink
 - Touch down on main wheels
 - Let nosewheel settle
 - Keep straight
 - After-landing checks – clear of runway

